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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,353

11/26/2003

Takatoshi Tsuchiya

117059

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25944

7590

02/06/2006

OLIFF & BERRIDGE, PLC

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EXAMINER

MARTIN, LAURA E

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/721,353	TSUCHIYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Laura E. Martin	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 1/27/06.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The final rejection submitted on December 23, 2005 is hereby withdrawn in place of the final rejection set forth below.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrese et al. (US 20040135855) in view of Hattori et al. (US 6402308).

Carrese et al. teaches a fluid container system (100) for containing fluid comprising: a first container that contains the fluid (112), the first container being evacuated to a negative gauge pressure when being filled with the fluid (P38, L1+); a second container (reservoir 134) having a capillary medium (capillary member 130) that contains the fluid; a passage between the first and second containers (132) communicating the fluid at a level wherein the passage is wetted with the fluid (fluid wets passage as it travels from the first container to the reservoir); a partition above the passage separating the first and second containers (136); a ventilation port to communicate air between an interior region in the fluid ejection system and ambient (260); at least one spill over region (160) to communicate the fluid (162) with the second

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container; a lid for sealing (218) the first and second containers from the ambient; and a plurality of channels (832; each section can be considered a separate channel) to communicate at least the air between the interior region and the second container (P49, L8+); wherein the channels are disposed on the lid (P41, L1+), the at least one spill over region has sufficient volume (P36, L1+) to contain a quantity of the fluid that migrates out of the second container, and the quantity of fluid corresponds to a volume needed to prevent the fluid from wetting all of the channels (P36, L1+; top channel not completely wet, it is in contact with the ambient). Carrese et al. also teaches the first and second containers being separated by a partition above the passage (136). Carrese et al. also teaches the fluid container system wherein the first container further comprises a plurality of first chambers (Fig 3, the chamber can be separated by a rib), and the second container further comprises a plurality of second chambers (134 and 160). Carrese et al. also teaches the fluid container system wherein the first and second containers comprise a concatenated communicating series of first and second containers connected together to communicate the fluid (132). Carrese et al. also teaches a method (P11) for ventilating a fluid container (ventilate through 260) comprising: containing the fluid in the first container (112); containing the fluid in a second container (134) with a capillary medium (130); connecting the first and second containers to enable the fluid to flow therebetween (132); connecting the second container to a ventilation port by a plurality of channels to allow at least air to flow therebetween (832); connecting the ventilation port to the ambient (260); connecting the second container to at least one spill over region (160), wherein the spill over region has

sufficient capacity to contain a quantity of fluid; sealing the first container from the ambient (with 218); connecting the second container to the ventilation port includes disposing the plurality of channels on a lid that seals the first container (P41, L1+); communicating the fluid from a first spill over region of the at least one spill over region to a second spill over region when a volume of the fluid exceeds a volumetric capacity of the first spill over region (160 is split into two chambers; when reservoir overflows, either chamber can be used in case of a spill over). Carrese et al. also teaches a plurality channels (figure 5, element 262) to communicate at least the air from the ventilation port (figure 4, element 260) to the second container (figure 4, element 230).

Carrese et al. does not teach each of the plurality of channels providing a different path capable of channeling air from the ventilation port to the second container. Carrese et al. also does not teach a first of the plurality of channels is located near one side wall of the fluid container system and a second of the plurality of independent channels is located near an opposite wall of the fluid container system.

Hattori et al. teaches each of the plurality of channels provides a different path capable of channeling air from the ventilation port to the second container (figure 17a, element 50). Hattori et al. also teaches a first of the plurality of channels is located near one side wall of the fluid container system and a second of the plurality of independent channels is located near an opposite wall of the fluid container system (figure 17a).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Carrese et al. with the disclosure of Hattori et al. in order to provide better ventilation in the ink chamber.

### ***Response to Arguments***

Applicant's arguments filed 1/27/2006 have been fully considered but they are not persuasive. Carrese et al. teaches a plurality of channels (figure 5, element 262) that communicates air from the ventilation port (figure 4, element 260) to the second container (figure 4, element 230). Carrese et al. does not teach the plurality of channels each providing a different path capable of channeling air, nor does it disclose a first of the plurality of channels being located near one side wall and a second of the plurality of independent channels being located near an opposite wall of the fluid container. Hattori overcomes this deficiency in figure 17A, in which air is introduced to a second container through a plurality of independent channels. In response to the argument made on the case of obviousness, it is obvious that a larger number of air-introducing channels will provide more ventilation than a single air-introducing channel of the size under the same environmental conditions.

### ***Conclusion***

Dodd (US 2002/0118257) also teaches multiple ventilation ports at opposite sides of a print cartridge in figure 3.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin



**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**